

**IN THE CLAIMS:**

The following listing of claims will replace all prior versions, and listings, of claims in the application.

**Listing of Claims:**

1    1. (Currently Amended) A system comprising:  
2         a signal generating and receiving unit;  
3         a cableless coupling assembly, the cableless coupling assembly comprising  
4         intermediate elements coupled to electrical pads; and  
5         an ultrasound transducing assembly coupled via the cableless coupling assembly  
6         to the signal generating and receiving unit.

1    2. (Currently Amended) A system comprising:  
2         transducers having  
3                 acoustic transducing elements and  
4                 an acoustically isolating assembly connected to the acoustic transducing  
5                 elements; and  
6         a signal generating and receiving unit ~~coupled via~~ connected to the acoustically  
7         isolating assembly ~~to the acoustic transducing elements~~.

1    3. (Original) The system of claim 2 wherein the acoustic transducing elements  
2         include at least an acoustically active material between two electrical contacts.

1    4. (Original) The system of claim 3 wherein the acoustic transducing elements  
2         include an acoustic matching assembly coupled to one of the two electrical contacts and  
3         an acoustic window coupled to the acoustic matching assembly.

1    5. (Original) The system of claim 2 wherein the signal generating and receiving unit  
2         includes a motherboard.

1   6.     (Original) The system of claim 2 wherein a filler material is placed within kerfs  
2   formed by the acoustically isolating assembly.

1   7.     (Original) The system of claim 2 wherein the acoustically isolating assembly  
2   includes posts of an electrically conductive and acoustically attenuating material.

1   8.     (Original) The system of claim 7 wherein the posts are anisotropic conductors.

1   9.     (Original) The system of claim 7 wherein the posts are isotropic conductors.

1   10.    (Withdrawn) The system of claim 2 wherein the acoustically isolating assembly  
2   includes insulating posts having conductors for conducting electrical signals.

1   11.    (Withdrawn) The system of claim 10 wherein the conductors are partially  
2   embedded within the posts.

1   12.    (Withdrawn) The system of claim 10 wherein the conductors are attached to the  
2   outside of the posts.

1   13.    (Withdrawn) The system of claim 10 wherein the conductors have an insulative  
2   backing that is coupled with the posts.

1   14.    (Withdrawn) The system of claim 10 wherein the conductors are longer than and  
2   extend beyond the posts.

1    15. (Previously Presented) A system comprising:  
2       circuitry having a signal generating and receiving unit;  
3       acoustic transducing elements that include  
4               an acoustically active material between two electrical contacts,  
5               an acoustic matching assembly coupled to one of the two electrical  
6       contacts, and  
7               an acoustic window coupled to the acoustic matching assembly;  
8       a cableless coupling assembly coupled to the signal generating and receiving unit  
9       and the acoustic transducing elements, including at least  
10              an acoustically isolating assembly having posts configured to be  
11              electrically conductive and acoustically attenuating, isolating the acoustic  
12       transducing elements; and  
13              a filler material placed within kerfs formed by the acoustically isolating  
14       assembly.

1    16. (Original) The system of claim 15 wherein the posts are anisotropic conductors.

1    17. (Original) The system of claim 15 wherein the posts are isotropic conductors.

1    18. (Withdrawn) The system of claim 15 wherein the acoustically isolating assembly  
2       includes conductors for conducting electrical signals coupled to the posts.

1    19. (Withdrawn) The system of claim 18 wherein the conductors are partially  
2       embedded within the posts.

1    20. (Withdrawn) The system of claim 18 further comprising an acoustical index  
2       matching element.

1 21. (Withdrawn) The system of claim 18 wherein the conductors are attached to the  
2 outside of the posts.

1 22. (Withdrawn) The system of claim 18 wherein the conductors have an insulative  
2 backing that is coupled with the posts.

1 23. (Withdrawn) The system of claim 18 wherein the conductors are longer than and  
2 extend beyond the posts.

1 24. (Withdrawn) A method of making an ultrasound system, comprising:  
2 coupling an ultrasound transducing assembly via a cableless coupling to a signal  
3 generating and receiving unit.

1 25. (Withdrawn) A method comprising:  
2 providing a signal generating and receiving unit;  
3 coupling an acoustically isolating assembly to the signal generating and  
4 receiving unit; and  
5 coupling acoustic transducing elements to the acoustically isolating assembly.

1 26. (Withdrawn) The method of claim 25 wherein coupling the acoustic transducing  
2 elements includes interposing an acoustically active material between two electrical  
3 contacts.

1 27. (Withdrawn) The method of claim 26 wherein coupling the acoustic transducing  
2 elements includes:  
3 coupling an acoustic matching assembly to one of the two electrical contacts; and  
4 coupling an acoustic window to the acoustic matching assembly.

B1

1    28. (Withdrawn) The method of claim 25 wherein the signal generating and  
2    receiving unit includes a motherboard.

1    29. (Withdrawn) The method of claim 25 further comprises placing a filler material  
2    within kerfs formed by the acoustically isolating assembly.

1    30. (Withdrawn) The method of claim 25 wherein coupling the acoustically isolating  
2    assembly includes coupling insulating posts to conductors for conducting electrical  
3    signals.

1    31. (Withdrawn) The method of claim 30 wherein the conductors are longer than  
2    and extend beyond the posts.

1    32. (Withdrawn) The method of claim 25 wherein the acoustically isolating assembly  
2    includes posts of an electrically conductive and acoustically attenuating material.

1    33. (Withdrawn) The method of claim 32 wherein the posts are anisotropic  
2    conductors.

1    34. (Withdrawn) The method of claim 32 wherein the posts are isotropic conductors.

1    35. (Withdrawn) The method of claim 32 wherein coupling acoustically isolating  
2    assembly further includes  
3        coupling conductors to an insulative backing; and  
4        coupling the insulative backing to the posts.

(b) 1

1       36. (Withdrawn) A method comprising:  
2              providing a generating and receiving unit;  
3              providing acoustic transducing elements, including  
4                  interposing an acoustically active material between electrical contacts,  
5                  coupling an acoustic matching assembly to one of the electrical contacts,  
6              and  
7                  coupling an acoustic window to the acoustic matching assembly;  
8              cablelessly coupling an acoustically isolating assembly to the generating and  
9              receiving unit and the acoustic transducing elements, the acoustically isolating assembly  
10     including  
11                  an acoustically isolating structure having posts configured to be  
12                  electrically conductive and acoustically attenuating; and  
13                  placing a filler material within kerfs formed by the acoustically isolating  
14              structure.

1       37. (Withdrawn) The method of claim 36 wherein the posts are anisotropic  
2       conductors.

1       38. (Withdrawn) The method of claim 36 wherein the posts are isotropic conductors.

1       39. (Withdrawn) The method of claim 36 wherein the acoustically isolating assembly  
2       includes insulating posts having conductors for conducting electrical signals.

1       40. (Withdrawn) The method of claim 39 wherein the conductors are partially  
2       embedded within the posts.

1       41. (Withdrawn) The method of claim 39 wherein the conductors are attached to the  
2       outside of the posts.

1    42.    (Withdrawn) The method of claim 39 wherein the conductors have an insulative  
2    backing that is coupled with the posts.

1    43.    (Withdrawn) The method of claim 42 wherein the conductors are longer than  
2    and extend beyond the posts.

1    44.    (Withdrawn) A method comprising:  
2                 transducing ultrasound via an ultrasound transducing assembly; and  
3                 communicating electrical signals between the ultrasound transducing assembly  
4    and a signal generating and receiving unit via a cableless coupling.

1    45.    (Withdrawn) The method of claim 44 further comprising sending said  
2    ultrasound through an acoustic index matching element.

1    46.    (Withdrawn) A method comprising:  
2                 communicating signals between a generating and receiving unit and acoustic  
3    transducing elements via an acoustically isolating assembly; and  
4                 transducing sound using the acoustic transducing elements.

(31

1    47. (Withdrawn) A method comprising:  
2        processing signals using a signal generating and receiving unit;  
3        transducing ultrasound using an ultrasound transducing assembly having  
4        acoustic transducing elements that include  
5                an acoustically active material between two electrodes,  
6                an acoustic matching assembly coupled to one of the two  
7                electrodes, and  
8                an acoustic window coupled to the acoustic matching assembly;  
9                communicating signals between the ultrasound transducing assembly  
10          and the signal generating and receiving unit via a cableless coupling, the  
11          cableless coupling including  
12                an acoustically isolating assembly having at least posts that are  
13                electrically conductive and acoustically isolating; and  
14                acoustically isolating the acoustic transducing elements using  
15                the acoustically isolating assembly, and  
16                a filler material that is placed within kerfs formed by the acoustically  
17          isolating structure.

1    48. (Currently Amended) A system comprising:  
2        a signal generating and receiving means;  
3        an ultrasound transducing means;  
4        a cableless coupling means ~~for coupling~~ connected to the signal generating and  
5        receiving means and to the ultrasound transducing means, including  
6              a means for  
7                          acoustically isolating the ultrasound transducing means from the  
8                          signal generating and receiving means, and  
9                          conducting electricity; and  
10                 an acoustic backing means for attenuating acoustic reflections.

B1